REMARKS/ARGUMENTS

Claims 1-18 and 38 remain in the application. Claims 8 and 38 have been amended for clarification of the cooking cycle parameters referenced therein.

The Examiner has indicated the allowability of claims 8, 9, and 38 if rewritten to overcome rejections under 35 U.S.C. §112, ¶2, and to include all of the limitations of the base claim and any intervening claims. Applicants appreciate the Examiner's notification of allowable subject matter.

Paragraph [0053] of the Specification has been amended to clarify the identification of flow lines A as a refrigerated air path. Paragraph [0069] has been amended to correct an inadvertent transposition of the terms "upstream" and "downstream." Paragraph [0072] has been amended to delete a sentence that notes an issue for further internal pre-filing evaluation, and that was inadvertently retained during finalization of the Specification. The sentence refers to a statement in paragraph [0072] that was removed prior to filing the Application. The Abstract, paragraph [0100], has been amended for purposes of form and phraseology.

No new matter is believed to be introduced. Applicants believe the changes presented herewith, taken with the following remarks, are sufficient to place the present application in condition for allowance. Reconsideration is respectfully requested.

Objections to Specification

The Abstract stands objected to as allegedly containing a form and legal phraseology often used in patent claims, specifically the phrase "the method comprising". The objection is traversed.

MPEP §608.01(b) states "The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided." Neither "means" nor "said" is used in the Abstract. MPEP §608.01(b) does not identify "the method comprising" as a phrase to be avoided. Furthermore, the Abstract describes a method. Thus, structuring the Abstract relative to what the method comprises cannot constitute objectionable form or legal phraseology. While, the phrase "the method comprising" may be redundant, it is not objectionable form or legal phraseology.

Nevertheless, the Abstract has been amended in an attempt to remove the grounds for objection. Applicants request that the objection be withdrawn.

The Specification stands objected to as allegedly failing to provide proper antecedent basis for the term "refrigerated air path" in several claims. The objection is traversed.

Paragraph [0053] and Figure 3 clearly identify an air path **A** for cold or chilled air from the refrigeration unit **20** to the cooking chamber **14** and back again. Thus, there is adequate antecedent basis for the term "refrigerated air path" in the claims. Nevertheless, paragraph [0053] has been amended to refer to the air flow circulation path between the refrigeration unit **20** and the cooking chamber **14** as a "refrigerated air path." Applicants request that the objection be withdrawn.

Claim Rejections – 35 U.S.C. §112, ¶2

Claims 8, 9, and 38 stand rejected under 35 U.S.C. §112, ¶2, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The rejection is traversed.

The Examiner asserts that claims 8 and 38 contain a broad recitation of two cooking cycle parameters plus a narrower statement of range or limitation for each parameter, i.e. an End Time and a Bake Time. However, the Examiner misapprehends the language of claims 8 and 38. Both claims 8 and 38 preliminarily define an unquantified plurality of cooking cycle parameters introduced in claim 1 as comprising two cooking cycle parameters, which are then further defined as an End Time and a Bake Time. This is not a case of a narrow range or limitation that falls within a broad range or limitation.

The Examiner relies on *Ex parte Wu, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989),* in support of the Examiner's position that broad language followed by narrow language *ipso facto* renders a claim indefinite. However, *Ex parte Wu* does not contain the statements that the Examiner attributes to the Board, and does not support the Examiner's position. In *Ex parte Wu*, the claim at issue defined a chemical composition "consisting of an epoxy resin, a petroleum sulfonate and a hydrocarbon diluent optionally containing a polyamine." The Examiner in that case had rejected the claim under §112, ¶2 as indefinite. The Board reversed the rejection. "We have carefully considered the respective positions of the examiner and the appellant, as well as

the evidence of record, in reaching our decision that the rejection under 35 USC 112 shall be reversed...."

The Board concluded that the claim was not indefinite.

> The rejection under 35 USC 112 is based on the examiner's contention that the term "optionally" in claim 1 does not clearly indicate whether the polyamine is intended to be a part of the composition. We have no difficulty determining the scope of claim 1 as drafted. The composition set forth in the claim can consist of the first three components recited or it can include a polyamine as a fourth component. We therefore do not consider the claims to be indefinite as a result of the claimed optional component.

Both claim 8 and 38 are not indefinite. Claims 8 and 38 simply identify the presence of two cooking cycle parameters, and then define each of those cooking cycle parameters. The Examiner's rejection is without merit.

Nevertheless, claims 8 and 38 have been amended to define the two cooking cycle parameters, i.e. the End Time and the Bake Time, without a prefacing reference to the two parameters. Applicants request that the rejection of claims 8 and 38 be withdrawn

The Examiner also asserts that the intended meaning and scope of "by cycling the heating element for the Bake Time" used in claim 38 is not clear, thus rendering claim 38 indefinite. Applicants disagree that the language is not clear. The Bake Time is defined previously in claim 38 as corresponding to a length of time to cook a food item. Thus, "by cycling the heating element for the Bake Time" means cycling the heating element for a length of time to cook a food item. There is nothing unclear about this language, and its intended meaning and scope are not indefinite. Applicants request that the rejection of claim 38 be withdrawn.

Further, paragraph 80 of the specification clearly describes the control of the operation of the heating element to be the cycling on and off of the heating element. This is the standard way in which heating elements are controlled. One of ordinary skill in the art would have complete knowledge of this control method. The Bake Time is also clear in that it is defined in the claims. Thus, the combination of these terms into the phrase "cycling the heating element for the Bake Time" is very clear. It means turning on and off the heating element during a time period equal to the Bake Time.

Claim 9 depends from claim 8. Claim 9 is not independently indefinite. Thus, since claim 8 is not indefinite, claim 9 is not indefinite. Applicants request that the rejection of claim 9 be withdrawn.

Claim Rejections – 35 U.S.C. §103(a)

Claims 1-7 and 10-18 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,497,276 to Clark et al. The rejection is traversed.

Initially, the rejection of claims 1-7 and 10-18 as allegedly obvious over Clark '276 is traversed since the Examiner's rejection fails to meet the *prima facie* standard for obviousness under 35 U.S.C. §103(a), and is therefore improper.

Claim 1 defines a method of operating a refrigerated oven to cook a food item comprising the steps of:

- producing cooled air in the refrigeration unit for a first period of time;
- circulating the cooled air through the refrigerated air path to the cooking chamber to prevent spoilage of the food item;
- heating the cooking chamber to cook the food item in the cooking chamber by cycling the heating element for a second time period; and
- delaying the initiation of step A until the temperature of the cooking chamber cavity is below a predetermined threshold temperature.

In relevant part to Clark '276, claim 1 calls for the delaying of the introduction of cooled air into the cooking chamber until the temperature of the cooking chamber is below a threshold temperature. An example of why this delay is important is when the oven has been previously used to cook a food item and the air in the cooking chamber is very hot. Such hot air is detrimental to the performance of the refrigeration components. Thus, the cooking chamber must cool to a safe temperature before the refrigeration system is started. Clark '276 does not disclose such a delay nor is it possible for Clark '276 to execute such a delay.

Clark '276 discloses a refrigerated oven that can maintain food items at a first, refrigerated temperature, cook the food items at a second, elevated temperature, and maintain the food items at a third, warming temperature. Clark '276 describes the operation of the refrigerated oven in the context of initially refrigerating the food item followed by cooking of the food item.

"Refrigerator-oven 20 is configured to selectively cool and heat enclosed chamber 28 to preserve food in a cooled state for a finite amount of time and then to cook food at a desired temperature for a finite amount of time." *Col. 3, ln. 30-33 (emphasis added).* "Accordingly, foods prepared ahead of time, either frozen or thawed, may be kept cool until it is time for the food to be baked. In addition, the food can be kept warm until it is time for the food to be consumed." *Col. 9, ln. 25-28.*

Control of the operation of the refrigerated oven in Clark '276 is limited to selecting a refrigeration cycle with a start and stop time, selecting a cooking cycle with a start and stop time and a cooking temperature, and selecting a warming cycle with a start and stop time. *See, e.g., col. 8, ln. 9- 48, col. 9, ln. 23-25.* The only way to program the refrigerated oven to perform refrigeration and cooking in a selected order is by selecting the start and stop times for the refrigeration and cooking cycles. For example, Figures 7 and 8 illustrate a refrigeration cycle starting at 10:30 p.m. and terminating at 4:00 p.m., a cooking cycle starting at 4:10 p.m. and terminating at 5:20 p.m., and a warming cycle starting at 5:30 p.m. and terminating at 6:00 p.m.

It does not appear that more than one refrigeration cycle can be set for a selected cooking cycle with the Clark '276 device, and Clark '276 does not disclose the programming of the refrigerated oven with more than one refrigeration cycle. Thus, the refrigerated oven of Clark '276 cannot accommodate a refrigeration cycle following the cooking cycle unless a pre-cooking refrigeration cycle is not used. However, this would require that the food item remain in the cooking chamber unrefrigerated until the cooking cycle is started, which is highly undesirable and would exacerbate the problem which the Clark '276 devise is intended to solve.

Even if the refrigerated oven of Clark '276 could be programmed with a refrigeration cycle following a cooking cycle, the refrigeration cycle would be initiated solely by the start time selected by the user. Thus, if the cooking cycle were to terminate at 5:20 p.m., the refrigeration cycle might be programmed to start, but only at some later time, such as 5:30 p.m., 5:40 p.m., or some other selected time. If the user desired to delay the initiation of the refrigeration cycle until the temperature of the cooking chamber decreased to a desired value, the user would have to estimate how quickly the temperature decreased after termination of the cooking cycle, and set the start time for the refrigeration cycle accordingly. Clark '276 discloses nothing about delaying

the initiation of any cycle, including the refrigeration cycle, until a specified temperature has been reached.

The Examiner concedes that Clark '276 does not disclose a method in which the production of cooled air in the refrigeration unit is delayed until the temperature in the cooking chamber cavity is below a predetermined threshold temperature. However, the Examiner asserts, without any support, "that it is known in the art of cooking and food preparation, and suggested by *Clark et al.*, that warm foods need to be kept above about 170 degrees Fahrenheit in order to prevent spoilage at warm/hot temperatures, and that cold foods need to be kept below about 45 degrees Fahrenheit in order to prevent spoilage at cool/cold temperatures." Furthermore, the Examiner asserts, without any support, that energy conservation is a consumer priority, and that it would have been obvious to modify the process disclosed by Clark '276 to delay cooling of warm foods until the temperature drops below a temperature of about 170 or 175 degrees Fahrenheit.

> "[T]o establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. See In re Dance, 160 F.3d 1339, 1343, 48 U.S.P.Q.2D (BNA) 1635, 1637 (Fed. Cir. 1998); In re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. (BNA) 1125, 1127 (Fed. Cir. 1984). Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See B.F. Goodrich Co. v. Aircraft Braking Sys. Corp., 72 F.3d 1577, 1582, 37 U.S.P.Q.2D (BNA) 1314, 1318 (Fed. Cir. 1996).
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> The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. See Dembiczak, 175 F.3d at 999, 50 U.S.P.Q.2D (BNA) at 1617. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. See WMS Gaming, Inc. v. International Game Tech., 184 F.3d 1339, 1355, 51 U.S.P.Q.2D (BNA) 1385, 1397 (Fed. Cir. 1999). The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 425, 208 U.S.P.Q. (BNA) 871, 881 (CCPA 1981) (and cases cited therein). **Whether the [Patent**

> **Office] relies on an express or an implicit showing, it must provide particular findings related thereto.** See Dembiczak, 175 F.3d at 999, 50 U.S.P.Q.2D (BNA) at 1617. **Broad conclusory statements standing alone are not 'evidence.'** Id." (Emphasis added)

In re Kotzab, 217 F.3d 1365, 1370 (Fed. Cir. 2000).

Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight. *In re Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. See, also, Manual of Patent Examining Procedure §706.02(j).*

The Examiner has not identified any teaching, suggestion, or motivation for the modification of the Clark '276 device asserted by the Examiner, as is required to meet the *prima facie* standard. Applicants' refrigerated oven of claim 1 requires that cooling of the cooking chamber cavity be delayed until the temperature in the cooking chamber cavity decreases to a predetermined threshold temperature. Thus, after cooking a food item at an elevated temperature, the cooling of the cooking chamber cavity and the food item does not begin until the temperature of the cooking chamber cavity decreases to a predetermined value, irrespective of the time it may take to reach this value. There is nothing in Clark '276 to suggest, teach, or motivate delaying the initiation of the cooling cycle until a predetermined temperature has been reached. Indeed, Clark '276 teaches away from doing so, since it discloses that refrigeration precedes cooking.

The Examiner fails to support her conclusion that "it is known in the art of cooking and food preparation, and suggested by *Clark et al.*, that warm foods need to be kept above about 170 degrees Fahrenheit in order to prevent spoilage at warm/hot temperatures, and that cold foods need to be kept below about 45 degrees Fahrenheit in order to prevent spoilage at cool/cold temperatures" with any evidence whatsoever.[1] The Examiner simply relies on broad conclusory statements which, standing alone, are not evidence. *Dembiczak, supra.* This alone cannot constitute a *prima facie* case of obviousness.

Furthermore, the Examiner asserts, without any support, that energy conservation is a consumer priority, and that it would have been obvious to modify the process disclosed by Clark

[1] Whether factually supported or not, the Examiner's conclusory statement is irrelevant with respect to claim 1. Claim 1 contains no element related to specific warming or cooling temperatures.

'276 to delay cooling of warm foods until the temperature drops below a temperature of about 170 or 175 degrees Fahrenheit. The Examiner offers no factual support whatsoever for this statement. Again, this is no more than a broad conclusory statement which, standing alone, is not evidence, and cannot constitute a *prima facie* case of obviousness.

Clark '276 defines no problem that would be solved by delaying initiation of the refrigeration cycle based on temperature. The problem to be solved which is identified by Clark '276 is the excessive length of time taken to prepare and cook an evening meal after the cook has arrived home at the end of the day, which can contribute to poor nutrition and food spoilage when thawed foods are maintained at room temperature during the day. *See, col. 1, ln. 13-55.* This problem would not be solved by delaying the refrigeration cycle until the temperature in the cooking cavity has decreased to a predetermined value.

Absent the identification of any teaching, suggestion, or motivation to modify the refrigerated oven of Clark '276, the only conclusion to be drawn is that the Examiner is simply using Applicants' disclosure as a blueprint for piecing together alleged knowledge in the art to supply elements missing from Clark '276 in order to assert the obviousness of claim 1. This clearly constitutes impermissible hindsight reconstruction.

Assuming, *arguendo*, that the asserted modification of Clark '276 is tenable, it would disclose nothing more than a refrigerated oven capable of an initial refrigeration cycle, followed by a cooking cycle, and a warming cycle, wherein the refrigeration cycle, the cooking cycle, and the warming cycle are controlled by selecting a start time and an end time for each cycle, and the refrigeration cycle is delayed until the temperature in the cooking cavity decreases to a preselected value. The operation of the refrigeration cycle would be undesirably affected by interference between the time-based control and the temperature-based control of the refrigeration cycle. Furthermore, it is likely that the temperature-based control of the refrigeration cycle would never be activated since the initial temperature of the cooking cavity when the refrigerating cycle is to begin would be approximately room temperature.

Claim 1 is not rendered obvious by the Examiner's asserted modification of Clark '276 and is thus in condition for immediate allowance. Applicants request that the rejection be withdrawn and that claim 1 be allowed.

Because claims 2-7 and 10-18 depend from claim 1, the impropriety of the asserted modification of Clark '276 discussed above applies with equal force to claims 2-7 and 10-18. Because claim 1 is not rendered obvious by the Examiner's asserted modification of Clark '276, claims 2-7 and 10-18 are not obvious and are thus in condition for immediate allowance. Applicants request that the rejection be withdrawn and that claims 2-7 and 10-18 be allowed.

CONCLUSION

For the reasons discussed above, claims 1-18 and 38 are in condition for immediate allowance. It is respectfully submitted that all of the claims in the application are allowable over the prior art of record. Notification of allowability is respectfully requested. Applicants request the issuance of an Advisory Action.

Respectfully submitted,

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